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**CERTIFICATE OF MAILING**

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*Walter J. Paster*  
Attorney for Applicant(s)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appl. No. : 10/821,420  
Applicant : Sitarama Penumetsa  
Title : SYSTEMS AND METHODS FOR  
IMPLEMENTING AN ENHANCED MULTI-  
CHANNEL DIRECT LINK PROTOCOL  
BETWEEN STATIONS IN A WIRELESS  
LAN ENVIRONMENT  
Filed : April 9, 2004  
TC/A.U. : 2661  
Examiner : (not yet assigned)  
Docket No. : SLA1507  
Customer No. : 21552

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

Transmitted herewith is an Information Disclosure Statement disclosing information which has come to the attention of applicant and/or his attorneys and is being submitted so as to comply with the duty of disclosure set forth in 37 C.F.R. § 1.56. In accordance with 37 C.F.R. § 1.97(b), the enclosed Statement is being filed within three (3) months of the filing date of the above-identified application or before the mailing date of a first Action on the merits.

Neither applicant nor his attorneys make any representation that any information disclosed herein may be "prior art" within the meaning of that term under 35 U.S.C. § 102 or §

103. Moreover, pursuant to 37 C.F.R. § 1.97, the filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made or as an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

In accordance with 37 C.F.R. § 1.98, transmitted herewith are:

1. A completed copy of Forms PTO/SB/08a and PTO/SB08b "Information Disclosure Statement by Applicant" listing the patents, publications and other information being submitted for consideration; and
2. A legible copy of each patent, publication and other item of information in written form listed on the enclosed Forms PTO/SB/08a and PTO/SB/08b, except for copies of U.S. patents and published U.S. patent applications which are not required for applications filed after June 30, 2003.

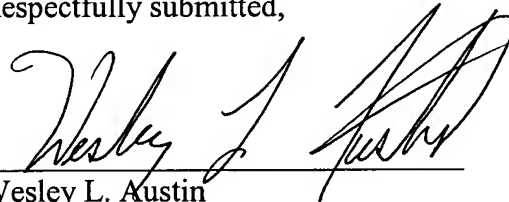
#### NON-ENGLISH INFORMATION

Pursuant to 37 C.F.R. § 1.98, following is a concise explanation of the relevance (as it is presently understood by the individual designated in 37 C.F.R. § 1.56(c) most knowledgeable about the content of the information), of each listed patent, publication or other information that is not in the English language:

1. Japanese Patent Application No. 2003-244161 published August 29, 2003 discloses a method to solve the hidden terminal problem and reduce to the utmost consumption power of an access point (AP; connection equipment) for a wireless LAN system performing wireless communication with a terminal, by relating the AP of interest to the terminal located in a cell (communication area) determined by the transmission power. By grasping the loads of a

plurality of APs by mutually transmitting/ receiving the loads through a wired LAN 2, and controlling transmission power to a terminal based on the load conditions of the APA and its neighboring AP, the APA is controlled to increase the transmission power output, etc., when the neighboring AP is in a high load condition and the APA is in a low load condition, so as to assist the communication performed by the neighboring AP. As such, by sharing the loads in the overall wireless LAN system, it becomes possible to solve the hidden terminal problem virtually. Moreover, it becomes possible to suppress the transmission power of each AP by controlling the transmission power of the neighboring AP in such a way as increasing the power only when assisting the communication of the APA, while generally maintaining the transmission power in a normal condition.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Wesley L. Austin', written over a horizontal line.

Wesley L. Austin  
Reg. No. 42,273  
Attorney for Applicant(s)

Date: July 27, 2004

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PTO/SB/08a (08-03)

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)  Sheet        1        Of        1	<b>Complete if Known</b>	
	Application Number	10/821,420
	Filing Date	April 9, 2004
	First Named Inventor	Sitarama Penumetsa
	Group Art Unit	
	Examiner Name	
	Attorney Docket Number	SLA1507

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	U1	US-2003/0100308	05/29/2003	Rusch	
	U2	US-5,960,344	09/28/1999	Mahany	
	U3	US-6,580,704	06/17/2003	Wellig et al.	
	U4	US-2002/0141375	10/03/2002	Choi	

FOREIGN PATENT DOCUMENTS						
Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	F1	WO 01/71981	09/27/2001	Gubbi et al.		
	F2	JP 2003-244161	08/29/2003	Ryota		

Examiner Signature		Date Considered	
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<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<b>Substitute for form 1449B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)  Sheet        1        Of        1	<b>Complete if Known</b>	
	Application Number	10/821,420
	Filing Date	April 9, 2004
	First Named Inventor	Sitarama Penumetsa
	Group Art Unit	
	Examiner Name	
	Attorney Docket Number	SLA1507

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	O1	ISO/IEC 8802-11 Information Technology – Telecommunications and Information Exchange Between Systems – Local and Metropolitan Area Networks – Specific Requirements – Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications	
	O2	802.11e-D6.0 Draft of 802.11e: Medium Access Control (MAC) Enhancements for Quality of Service (QoS)	
	O3	Srini Kandala, "Direct Link Protocol", IEEE 802.11-02/438, October 2000.	
	O4	Digital Home Working Group (DHWG) Usage Cases	

Examiner Signature		Date Considered	
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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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